

BookletChart™

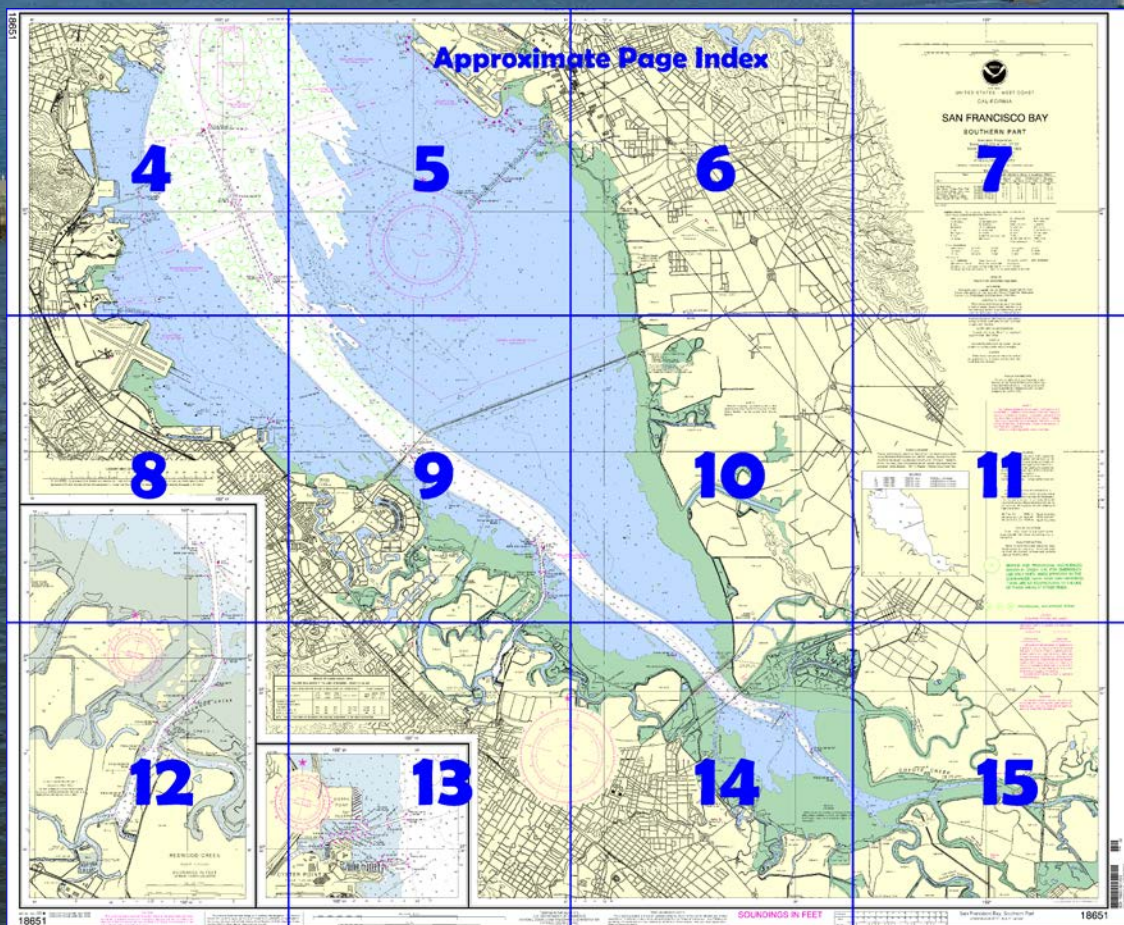
San Francisco Bay – Southern Part NOAA Chart 18651



A reduced-scale NOAA nautical chart for small boaters
When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=18651>.



(Selected Excerpts from Coast Pilot)
S of San Francisco, **Point Avisadero**, which is the E extremity of Hunters Point, **Sierra Point**, Oyster Point, **Point San Bruno**, and Coyote Point, all on the W shore of the bay, are prominent natural features. Sierra Point is the site of a small-boat harbor which can accommodate about 500 boats. **Oyster Point Channel**, marked by private lights, has depths of about 5 feet, except for a 2-foot shoal in about 37°40'09.5"N., 122°22'47.5"W., and leads to a small basin. A spur channel, marked by private lights, branches off the N side of Oyster Point Channel

and leads to the entrance to the small-boat harbor at Sierra Point. The basin at the end of Oyster Point Channel has two private wharves in ruins and sheds on the W side; a marina that can accommodate about 200 boats is on the S side.

Oyster Point is the site of a small-boat harbor accommodating about 570 boats. Depths of about 8 feet are in the harbor. An entrance channel E of the harbor is marked by private lights. In 2006, the channel had a reported depth of 10 feet.

The area between Point San Bruno and Coyote Point is occupied by **San Francisco International Airport**. A **security zone** has been established in the waters surrounding the airport. (See **165.1192**, chapter 2, for limits and regulations.)

Coyote Point is the most prominent point on the S bay. A small-craft harbor accommodating about 580 boats is on the E side of the point. The entrance channel, marked by two private lights, had a reported depth of 10 feet in 2006. The harbor, operated by San Mateo County, is composed of two basins having depths of about 8 feet. A section of the old San Mateo lift bridge, now used as a fishing pier, extends 4,135 feet from the San Mateo shore just S of the new bridge. A part of the fishing pier extends into the W part of the main channel.

Redwood Creek, 4 miles SE of San Mateo Bridge, is entered through a marked channel that leads to the municipal wharves at the **Port of Redwood City**, 2.5 miles above the mouth. Turning basins are to the N and S of the wharves. Federal project depths are 30 feet in the channel and basins. (See Notice to Mariners and latest editions of charts for controlling depths.)

Redwood City is 2 miles S of the port facilities. Redwood City Municipal Marina, just S of the port in about 37°30'08"N., 122°12'45"W., can accommodate about 225 small craft. Other small-craft facilities are further upstream in Redwood Creek. A full service marina on the S side of Westpoint Slough can accommodate vessels up to 120 feet.

Coyote Creek has many tributary sloughs. The main channel is marked as far as **Calaveras Point**, about 4 miles above the railroad bridge at Dumbarton Point. The power cables, 1.3 miles above Calaveras Point, have a clearance of 65 feet.

A channel, marked by a daybeacon at the entrance, leads for about 3 miles through **Guadalupe Slough**. In 1985, a submerged obstruction with 3 feet over it was about 150 yards NNW of Daybeacon 20; caution is advised when transiting the area.

Just S of the Metropolitan Oakland International Airport, a dredged channel leads to a small-craft harbor operated by the city of San Leandro. The channel is marked by lights and daybeacons; a seasonal sound signal is at the entrance. In 2011, the controlling depth was 5 feet in the entrance channel to the basin, thence 2 feet in the access channel through the basin. The access channel branching E from the entrance to the basin had a depth of 5 feet.

The harbor accommodates about 500 small craft; 15 guest slips are maintained. The harbormaster's office is on the SW side of the basin. A high-speed patrol boat is maintained. (See the small-craft facilities tabulation on chart 18652 for services and supplies available.)

A **restricted area** is in Oakland Inner Harbor from the entrance to the E boundary of the Naval Air Station. (See **334.1020** and **334.1030** chapter 2, for limits and regulations.)

Quarantine, customs, immigration, and agricultural quarantine.—(See chapter 3, Vessel Arrival Inspections, and Appendix A for addresses.)

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Alameda	Commander	
	11 th CG District	(510) 437-3700
	Alameda, CA	

Navigation Managers Area of Responsibility



NOAA's navigation managers serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry.

To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

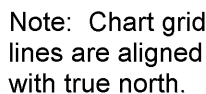
Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



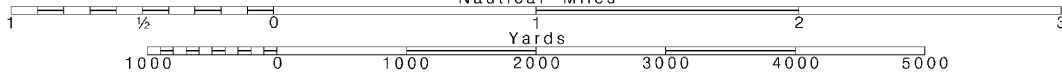
For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area.

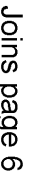
These volumes are available online at <http://www.navcen.uscg.gov>



~~SCALE 1:40,000~~
Nautical Miles

See Note on page 5.





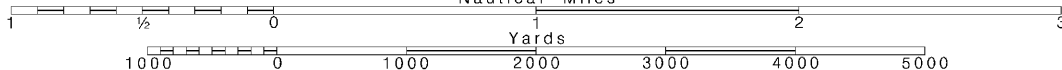
5

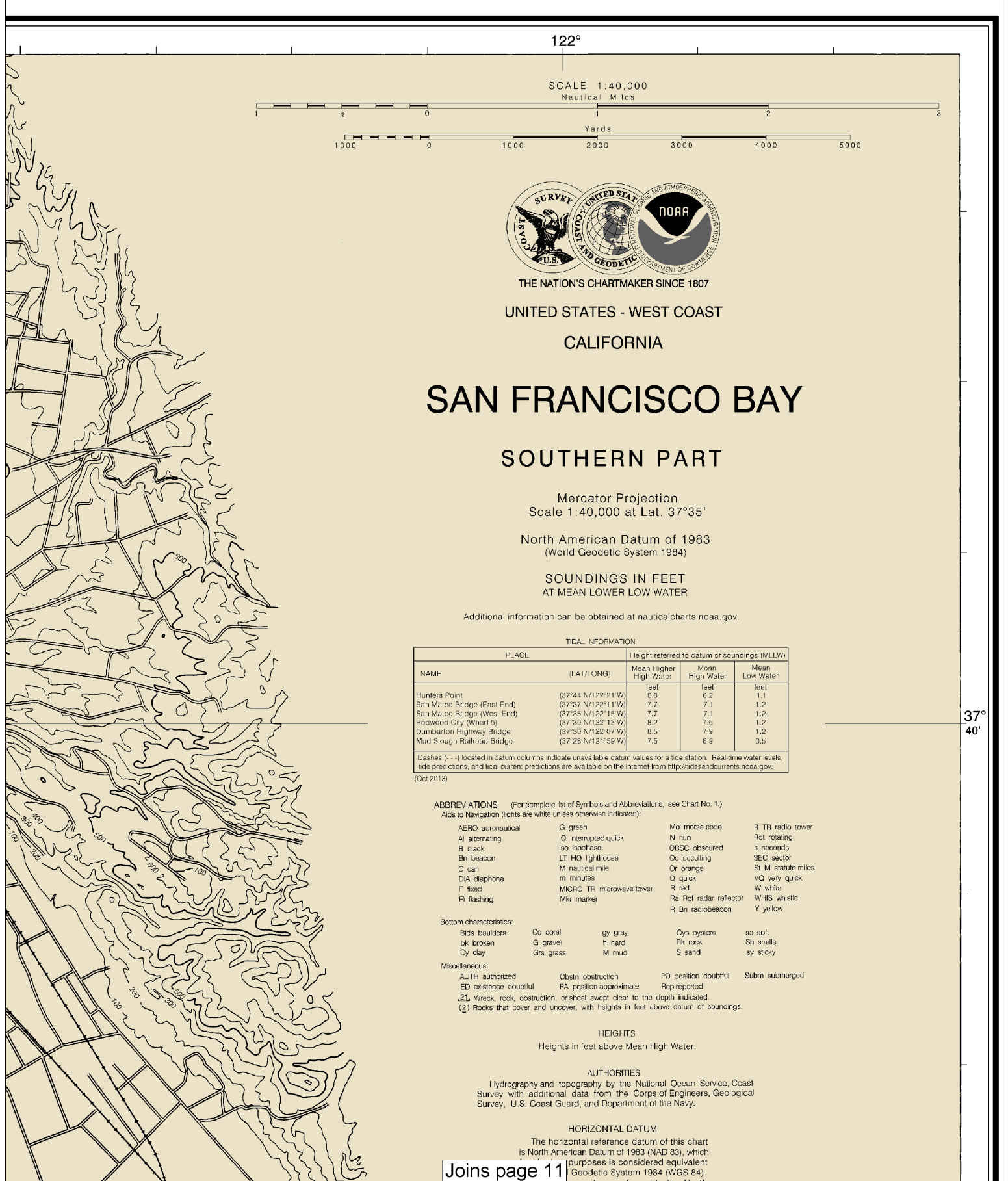
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

~~SCALE 1:40,000~~
Nautical Miles

See Note on page 5.





122°

SCALE 1:40,000
Nautical Miles

Yards

1000 0 1000 2000 3000 4000 5000



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST

CALIFORNIA

SAN FRANCISCO BAY

SOUTHERN PART

Mercator Projection
Scale 1:40,000 at Lat. 37°35'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

TIDAL INFORMATION

NAME	PLACE (LAT/LONG)	Height referred to datum of soundings (MLLW)		
		Mean Higher High Water	Mean High Water	Mean Low Water
Hunter's Point	(37°44' N/122°21' W)	6.8	6.2	1.1
San Mateo Bridge (East End)	(37°37' N/122°11' W)	7.7	7.1	1.2
San Mateo Bridge (West End)	(37°35' N/122°15' W)	7.7	7.1	1.2
Redwood City (Wharf 5)	(37°30' N/122°13' W)	8.2	7.6	1.2
Dumbarton Highway Bridge	(37°30' N/122°07' W)	8.5	7.9	1.2
Mud Slough Railroad Bridge	(37°28' N/122°09' W)	7.5	6.9	0.5

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal currents are available on the internet from <http://tidesandcurrents.noaa.gov>.
(Oct 2013)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Ai alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Rof radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Bld boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Gr grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

HEIGHTS

Heights in feet above Mean High Water.

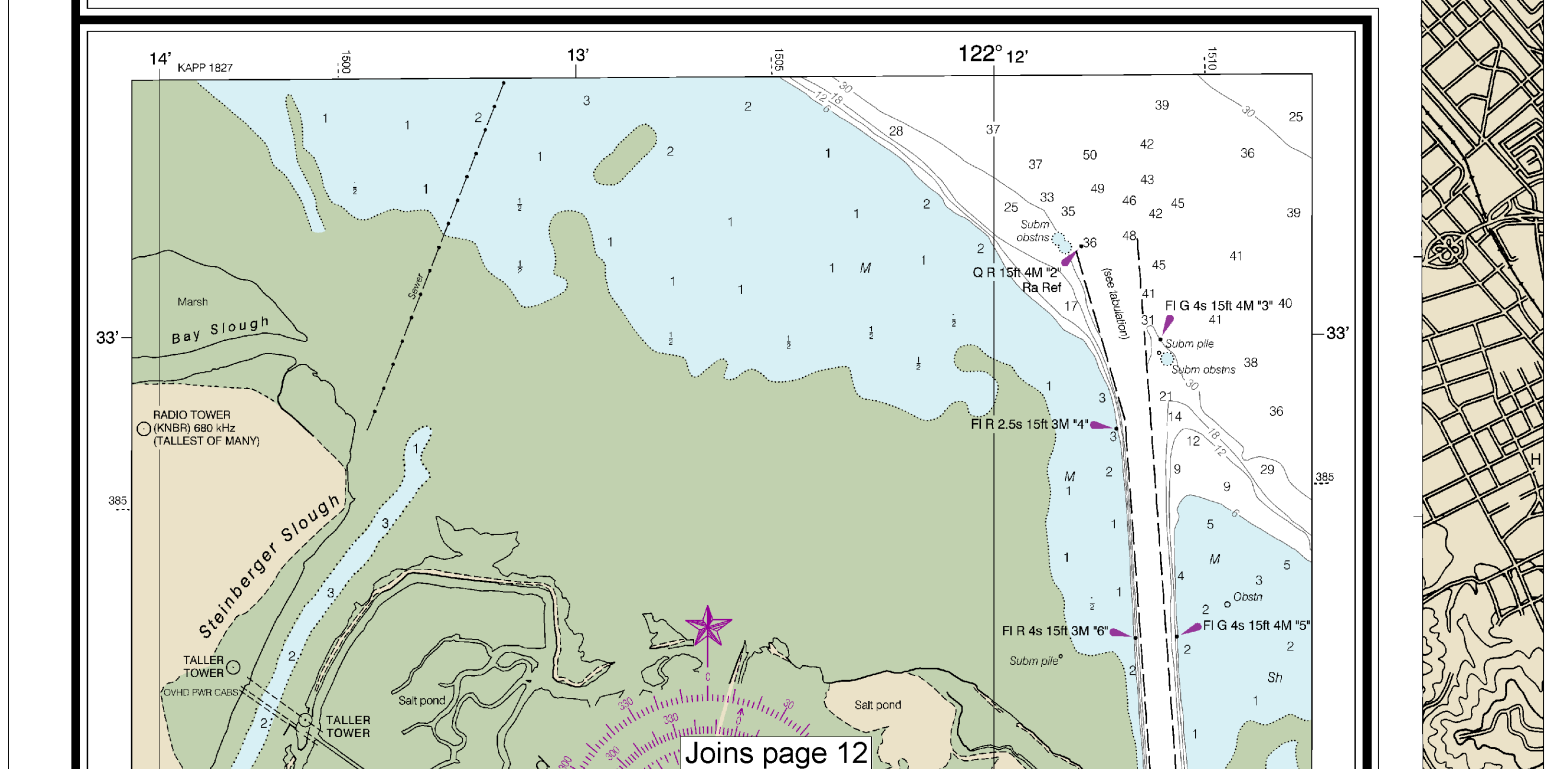
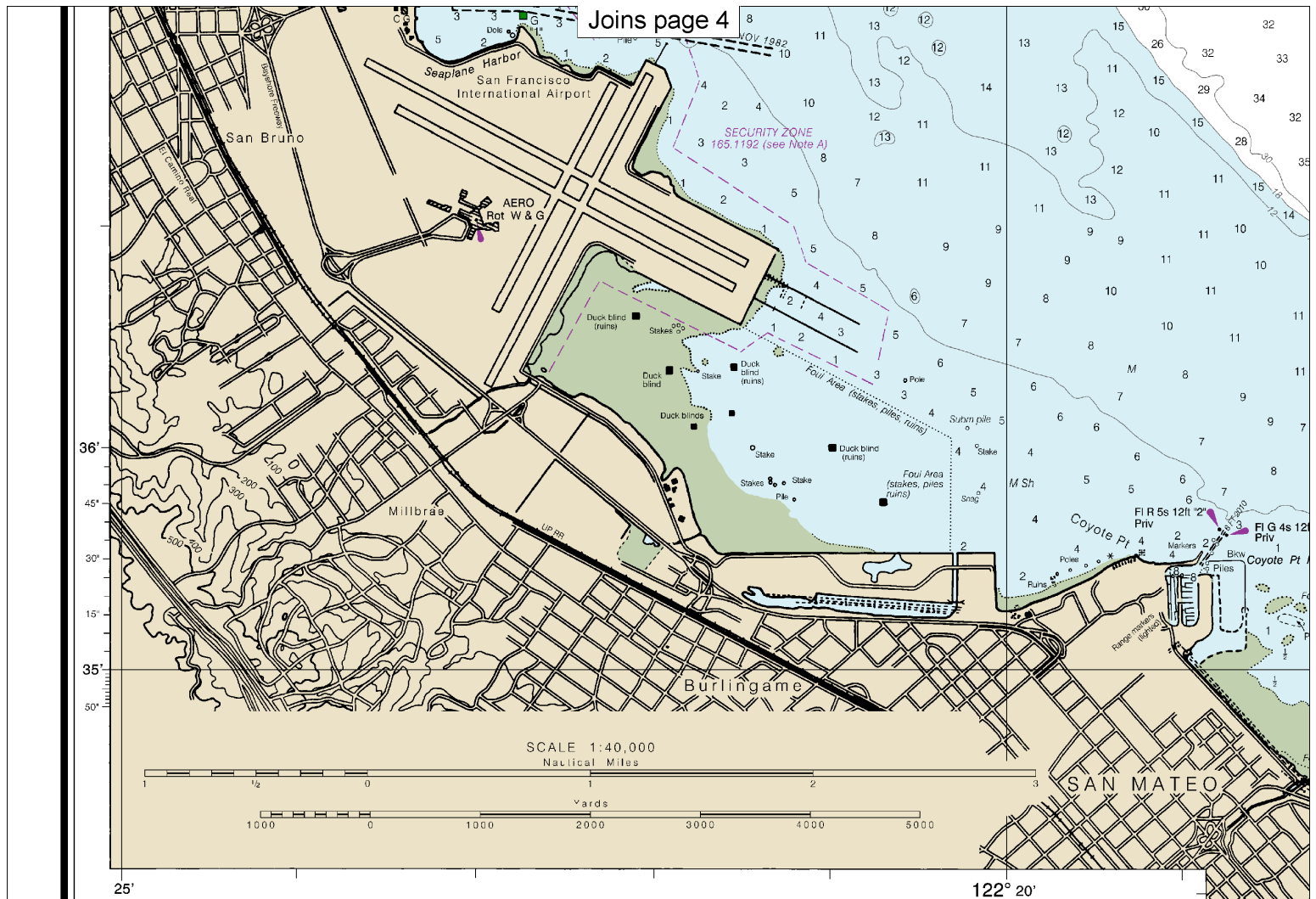
AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Department of the Navy.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for purposes is considered equivalent to Geodetic System 1984 (GWS 84).
Positions referred to the North

Joins page 11

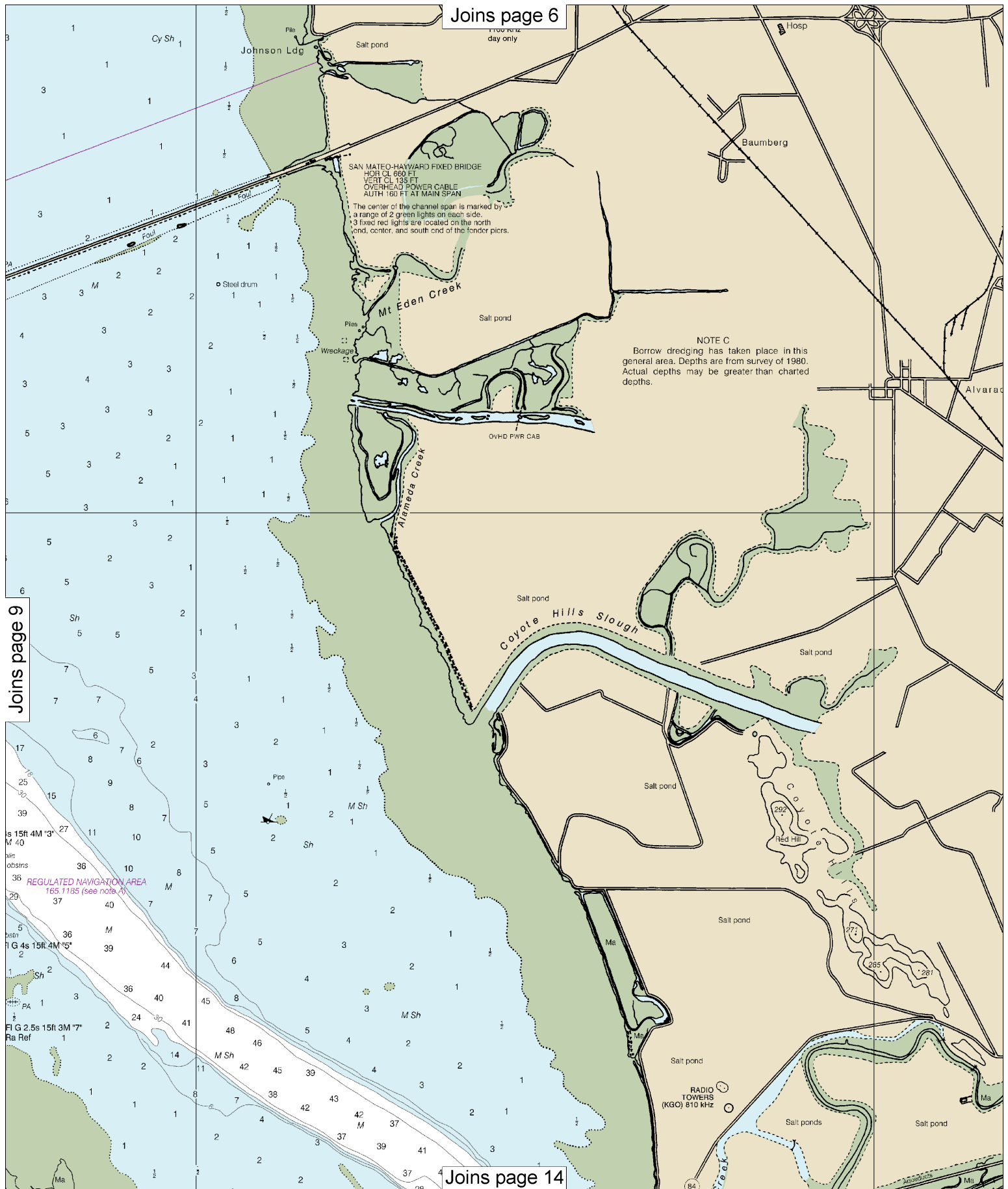


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

~~SCALE 1:40,000~~
Nautical Miles

See Note on page 5.



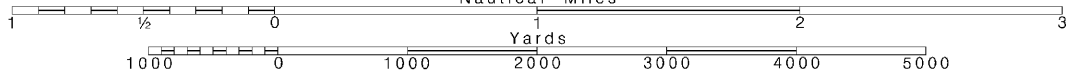
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Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



AUTHORITIES

Topography by the National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Department of the Navy.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.241" southward and 3.881" westward to agree with this chart.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at: the Office of the Commander, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in San Francisco, California.

Refer to charted regulation section numbers.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
 (Accurate location) (Approximate location)

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. Pise, CA	KHB-49	162.400 MHz WX2
Mt. Umunhum, CA	KEC-49	162.550 MHz WX1
Mt. Umunhum, CA	WWF-64	162.450 MHz WX5

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area	Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

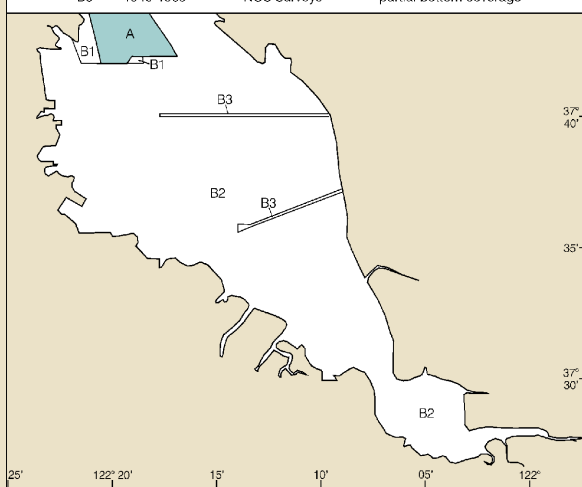
Covered wells may be marked by lighted or unlighted buoys.

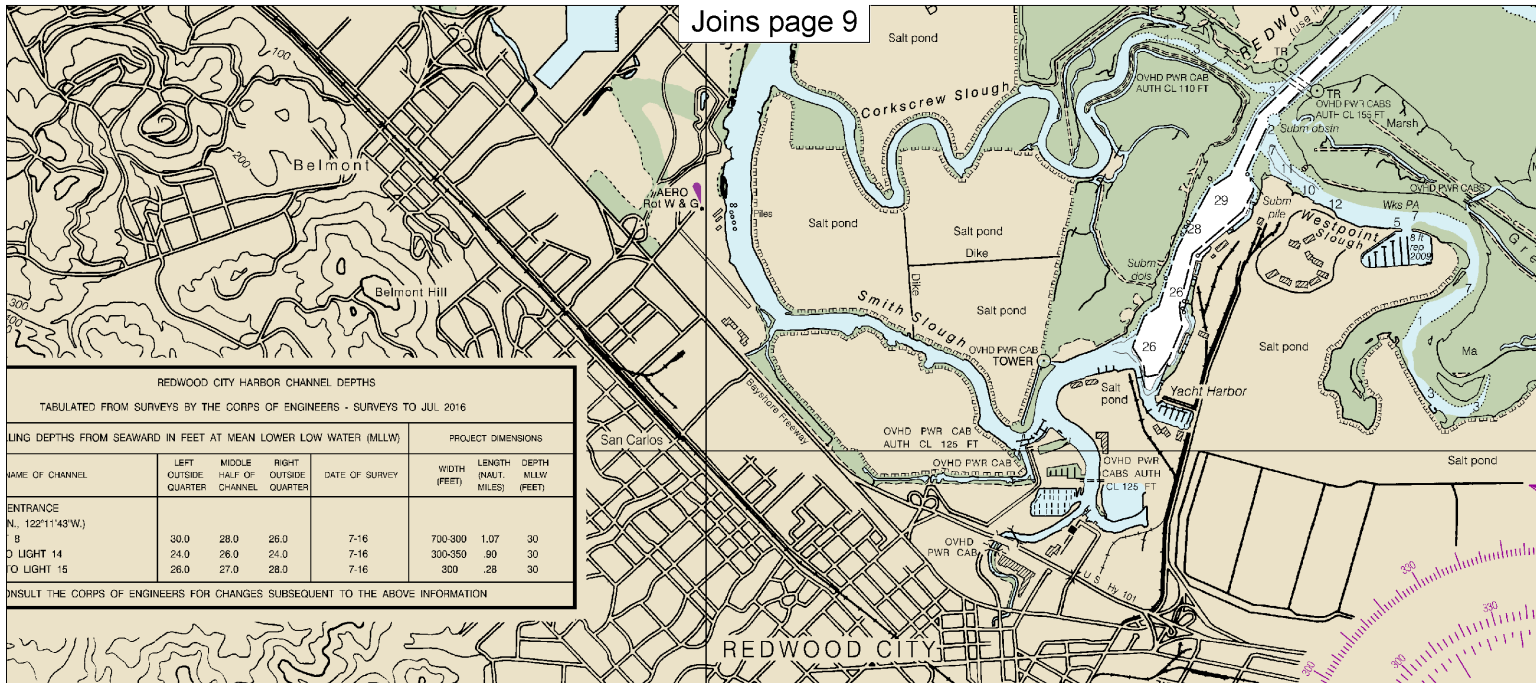
SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

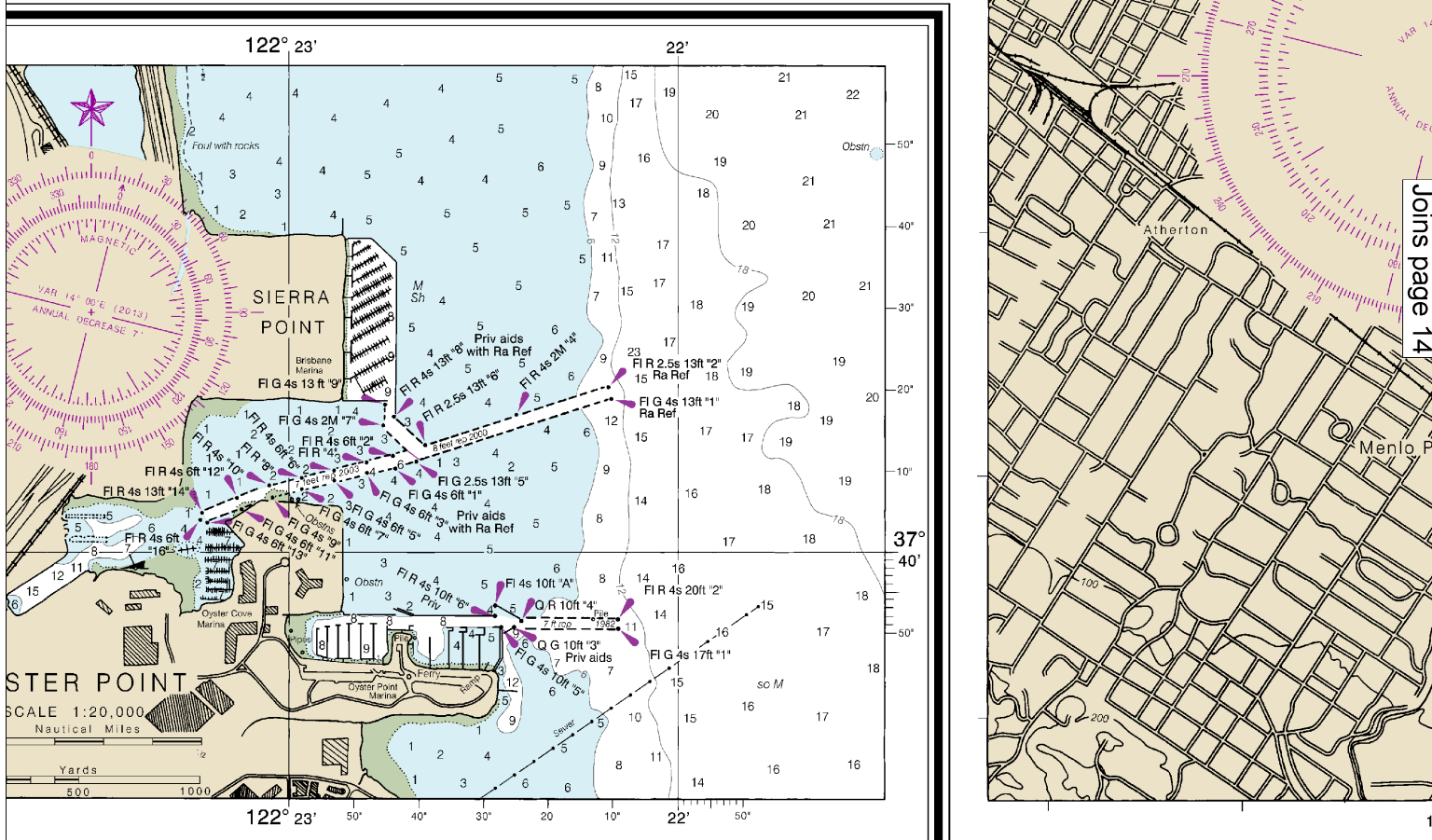
SOURCE

A	1990-2013	NOS Surveys	full bottom coverage
B1	1990-1993	NOS Surveys	partial bottom coverage
B2	1970-1989	NOS Surveys	partial bottom coverage
B3	1940-1969	NOS Surveys	partial bottom coverage





122° 15'



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submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or unlighted buoys.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.



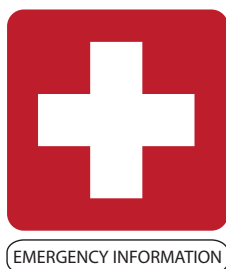
122°

848.9 X 1030.3 mm

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

San Francisco Bay, Southern Part
SOUNDINGS IN FEET - SCALE 1:40,000

18651



VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

Quick References

Nautical chart related products and information	— http://www.nauticalcharts.noaa.gov
Interactive chart catalog	— http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml
Report a chart discrepancy	— http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	— http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	— http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	— http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	— http://tidesandcurrents.noaa.gov
Marine Forecasts	— http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	— http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	— http://www.nowcoast.noaa.gov/
National Weather Service	— http://www.weather.gov/
National Hurricane Center	— http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	— http://ptwc.weather.gov/
Contact Us	— http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.